

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,033	02/21/2002	David S. Vander Kooi		9566
7	590 09/24/2003			
Dennis L. Thomte THOMTE, MAZOUR & NIEBERGALL Suite 1111			EXAMINER	
			ROSENBERG, LAURA B	
2120 South 72nd Street Omaha, NE 68124			ART UNIT	PAPER NUMBER
			3616	***
			DATE MAILED: 09/24/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

			A				
•		Application No.	Applicant(s)				
Office Action Summary		10/082,033	VANDER KOOI ET AL.				
		Examiner	Art Unit				
		Laura B Rosenberg	3616				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHO THE N - Exter after - If the - If NO - Failur - Any n	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may y within the statutory minimum of will apply and will expire SIX (6) No., cause the application to become	a reply be timely filed thirty (30) days will be considered timely. IONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on						
2a)□	· · · · · _ —	— · iis action is non-final.					
3)□	•		natters prosecution as to the merits is				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)⊠	Claim(s) 1-7 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7</u> is/are rejected.							
7)	7) Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	on Papers						
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>21 February 2002</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachmen	t(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152) 6) Other:							
J.S. Patent and T	rademark Office						

PTOL-326 (Rev. 04-01)

Art Unit: 3616

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment of claims 6 and 7 with upper control arms above the forwardly extending portions of the stabilizer bar must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the information discloses on page 6, lines 9-11 is incorrect. The embodiment illustrated does not describe upper control arms, but rather this embodiment describes lower control arms. Appropriate correction is required.

Claim Objections

3. Claims 1 and 6 are objected to because of the following informalities: First and second control arms should be referred to throughout each claim as either arms or rods, but not both arms and rods. Appropriate correction is required.

Page 2

Art Unit: 3616

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 5. Claims 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the embodiment of an axle suspension system having first and second upper control arms and a stabilizer bar having first and second forwardly extending end portions that are located below the first and second upper control arms are not supported by the specification or the drawings.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 6 recite the limitation "the opposite ends" in line 20. There is insufficient antecedent basis for this limitation in the claim. The examiner recommends deleting "the" from the phrase.

Page 3

Art Unit: 3616

Claim Rejections - 35 USC § 103

Page 4

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarrow et al. (5,509,684) in view of Stuart (5,678,845). In regards to claims 1-3, Yarrow et al. disclose an axle suspension system for a load-bearing vehicle (all vehicles bear loads) including fist and second longitudinally extending frame members (#11) having rearward (right side in figure 1) and forward (left side in figure 1) ends comprising first and second mounting brackets (#22) secured to the first and second frame members, respectively, first and second lower control arms (#14) having forward (near #22) and rearward (near #24) ends, pivotally secured at the forward ends (via #20, 22, 22A) to the first and second mounting brackets, respectively, and extending rearwardly therefrom, and first and second axle supports (#17) positioned rearwardly of the first and second mounting brackets, respectively. The rearward ends of the first and second lower control arms are pivotally secured to the first and second axle supports (via #24, 29, 29A), respectively. An axle (#12) and wheel (not shown) assembly is operatively secured to the first and second axle supports (best seen in figures 1, 3, 4), and first and second air springs (#13) are operatively secured to the axle and wheel assembly (best seen in figure 1). Yarrow et al. do not disclose a stabilizer bar assembly. Stuart teaches an axle suspension system for a load-bearing vehicle including first and second

Art Unit: 3616

longitudinally extending frame members (#15) having rearward (right side in figure 2) and forward (left side in figure 2) ends comprising first and second mounting brackets (#17) secured to the first and second frame members, respectively, and first and second axle supports (#23) positioned rearwardly of the first and second mounting brackets. respectively. An axle (#19) and wheel (not shown) assembly is operatively secured to the first and second axle supports (best seen in figure 2), and first and second air springs (#33) are operatively secured to the axle and wheel assembly (best seen in figure 2). The axle suspension system further comprises a stabilizer bar assembly (#11, 41) including an elongated, generally transversely extending base portion (#45) having first and second generally forwardly extending end portions (#43) at opposite ends thereof, the end portions having forward ends (#49). The first and second forwardly extending end portions (#43) of the stabilizer bar assembly are pivotally connected (via #47, 55, 57; best seen in figure 3) at their forward ends (#49) to the first and second mounting brackets (#17), respectively. The base portion (#45) of the stabilizer bar assembly is pivotally connected, via resilient bushings (#63, 65) to the first and second axle supports (column 3, lines 35-39). Further, the first and second forwardly extending end portions (#43) of the stabilizer bar assembly each extend outwardly from the axle support (#23), thence forwardly, thence inwardly and forwardly, and thence forwardly towards the mounting bracket (#17). It would have been obvious to one skilled in the art at the time that the invention was made to modify the axle suspension system of Yarrow et al. such that it comprised a stabilizer bar as claimed in view of the teachings of Stuart so as to provide roll stability without increasing the vertical rate of the suspension

Art Unit: 3616

system when both wheels of the axle move simultaneously with respect to the vehicle frame (Stuart: column 2, lines 4-8).

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarrow et al. (5,509,684) in view of Stuart (5,678,845), further in view of Paul (4,146,249). In regards to claims 4 and 5, Yarrow et al. do not disclose a stabilizer bar assembly. Paul teaches an axle suspension system for a load-bearing vehicle including first and second longitudinally extending frame members (#11) comprising a stabilizer bar assembly (#7) including an elongated, generally transversely extending base portion (#18) having first and second generally forwardly extending end portions (#8) at opposite ends thereof. The stabilizer bar assembly extends inwardly and forwardly from its pivotal connection (#12) on one side of the vehicle, thence outwardly and rearwardly to its pivotal connection (#12) on the opposite side of the vehicle (only one side shown in the figure). It would have been obvious to one skilled in the art at the time that the invention was made to modify the axle suspension system of Yarrow et al. such that it comprised a base portion of a stabilizer bar assembly with a specific configuration as claimed in view of the teachings of Paul so as to provide great preciseness of the wheel guidance as well as high comfort for the passengers (Paul: column 2, lines 25-29).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Borgward, Wilfert et al., Behles, Allison, Aulerich et al., Turck et

Page 6

Art Unit: 3616

al., and Daily et al. disclose specific configurations of sway bars. Arning, Fuchs et al., Emery, Griffin, Sr., and Barlas et al., and Raidel disclose suspension systems for vehicles. Pierce discloses a suspension system with upper and lower control arms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B Rosenberg whose telephone number is (703) 305-3135. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

I RR

Lama B. Rosent

PAUL N. DICKSON

Page 7

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600